START HERE

IMPORTANT! READ IMPORTANT SAFETY NOTICES AND REFER TO INSERT SHEET INSTRUCTIONS TITLED "REMOVING THE OLD DOOR/PREPARING THE OPENING". IF THE INSERT SHEET INSTRUCTIONS ARE NOT INCLUDED, CONTACT WAYNE-DALTON CORP. FOR A FREE COPY. If removing an existing door, carefully follow the directions given on the insert sheet instruction in the portion titled "Removing the Old Door".

⚠WARNING!

REMOVAL OF AN EXISTING DOOR CAN BE DANGEROUS. FOLLOW INSERT SHEET INSTRUCTIONS CAREFULLY, OTHERWISE SERIOUS INJURY OR DEATH COULD OCCUR.

Begin the installation of the door by checking the opening. It must be the same size as the door. Vertical jambs must be plumb and the header level. Side clearance, from edge of door to wall, must be minimum of 3-1/2" (89 mm) on each side. For proper opening preparation refer to the portion of the insert sheet instructions titled "Preparing the Opening". Follow the steps below. The steps correspond to the illustrations on the garage door layout.

NOTE: It is recommended that 5/16" x 1-5/8" and 2" lag screws be pilot drilled using a 3/16" (5mm) drill bit, and 1/4" x 1" lag screws be pilot drilled using 1/8" (3mm) drill bit, prior to fastening.

1A

NOTE: If you have riveted track, skip this step.
Fully adjustable track: Secure the vertical to the lower slot in the flagangle using (1) stud plate and (2) whiz nuts.
NOTE: Some "bolt on track" will have (2) track bolts (k) instead of a stud plate.

Q.I. Track: Put the lower Twistlock tab on the flagangle into the Twistlock hole in the vertical track. Give the flagangle 1/4 turn to lock in place. Repeat for other side.

1B-1C

NOTE: If you have riveted track, skip this step.
Fully adjustable track: To attach the bottom (short) jamb bracket, locate the lower hole/slot pattern in the vertical track. Align the slot in the jamb bracket with the lower hole of the hole/slot pattern in the vertical track. Secure jamb bracket with (1) 1/4-20 x 9/16" track bolt and nut. Place the center (long) jamb bracket over the hole/slot pattern nearest to the center of the track. Loosely fasten the bracket onto the track with (1) 1/4-20 x 9/16" track bolt and nut.

NOTE: Doors over 7'3" high get (3) set of jamb brackets. Install the center and top jamb brackets so that they are equally spaced in between the flagangle and bottom jamb bracket.

1D

NOTE: If you have riveted track, skip this step.
Q.I. Track: Using the Quick Install Jamb Bracket Schedule (located on the reverse side), determine the placement of the jamb brackets for your door height. Align the Twistlock™ wings on each jamb bracket with the correct butterfly hole in the track and turn the jamb bracket perpendicular to the track so the mounting flange is toward the back leg of the track.

2A

Bottom brackets are right and left. Before attaching the bottom brackets, secure the counterbalance cables to the brackets by placing the looped end of the cables over the milford pin. Attach the bottom brackets to the bottom corners of the sections, aligning the bottom of the bracket with the bottom of the section. Using the bracket as a template, drill (3) 9/32" (7mm) dia. holes through the section. Secure the bracket to the section with (3) 1/4-20 x 1-7/8" carriage bolts and hex nuts each. **NOTE:** Double car doors get (5) carriage bolts and nuts per bottom bracket (see **2C**). Now install a 1/4" x 1" tamper-resistant lag screw into each bottom bracket (Pilot drilling a 1/8" (3mm) dia. hole into the section.
IMPORTANT! When pre-drilling 1/8" hole for tamper-resistant lag be sure NOT to drill through the section).
IMPORTANT! Right and left hand is always determined from inside the building looking out.

Strut Installation (if necessary): Wood doors are provided with short struts and long struts. Center the short strut on the bottom of the bottom section in between the two bottom brackets. The strut should be at least 3/4" (19mm) from the bottom of the section. Secure strut using (2) 1" lag screws on each end and center stile (alligned with hinges) locations.

2B

Align the bottom seal (may not be provided) with the angled extension to the outside of the door (see **2B**). Starting at one end of the door, attach the seal to the bottom of the section with 3/4" long galvanized roofing nails (not supplied). Stretch the seal slightly and nail the seal to the bottom of the door every 6".

3A-3B

Locate the lower leaf of the No. 1 end hinges and required No.1 center hinges over the predrilled holes in the end stiles and center stiles at the top of the bottom section (for strut installation, see below). Secure the hinges to the sections using (2) 1/4-20 x 1-7/8" carriage bolts and hex nuts each. Insert (1) roller in each end hinge. Repeat using No. 2 end hinges for second (lock) section and No. 3/No.4 hinges for the third/forth (intermediate) section(s).
IMPORTANT! Do NOT over tighten hex nuts.
IMPORTANT! When placing rollers into end hinges No. 2 and higher, the roller must be inserted into the tube furthest away from section. See **3B**.

Strut Installation (if necessary): Place a long strut over the lower hinge leafs of the section and secure the hinges and strut together to the sections using (2) strut clips and (2) 1/4-20 x 1-7/8" carriage bolts and hex nuts each. (See **Fig 22 this page and Strutting Schedules** on reverse side of this manual.)

4A-4B

Standard Flush doors are predrilled for hinges and lift handles. Lift handles may be offset from center of section. Align lift handle with predrilled holes and assemble the outside and inside lift handle back to back with (2) 1/4" x 2-1/2" (64 mm) carriage bolts and nuts.

5A-5B

Before installing the bottom section, measure and cut the vinyl jamb weather-stripping or wood door stops (weather-stripping or wooden stops may or may not be supplied) for entire garage door opening. Vinyl weather seal must be installed prior to door installation when utilizing fully adjustable track. Attach the weather seal to the jamb 1/8" to 1/4" (3-6mm) past door jamb using the nails supplied with strip. This will help hold the bottom door section in place. Now, center the bottom section in the door opening. Level it using wooden shims under the bottom seal as needed. Once the bottom section is level, all the other components will automatically align. Hold the section in the opening while attaching vertical tracks.
NOTE: In the event that the bottom section was shimmed to level it, then the vertical track on that same side of the section must be raised the thickness of the shim(s). The tops of the vertical track must be level.

6A-6B

Position the first vertical track over the rollers of the bottom section. Make sure the counterbalance cable is located between the rollers and the door jamb. Secure jamb brackets and flagangles to the jamb using 5/16" x 1-5/8" lag screws. Install the other vertical track the same way. Hang counterbalance cables over flagangles.

IMPORTANT! The tops of the vertical tracks must be level from side to side. If the bottom section was shimmed to level it. The vertical track on the shimmed side, must be raised the height of the shim.

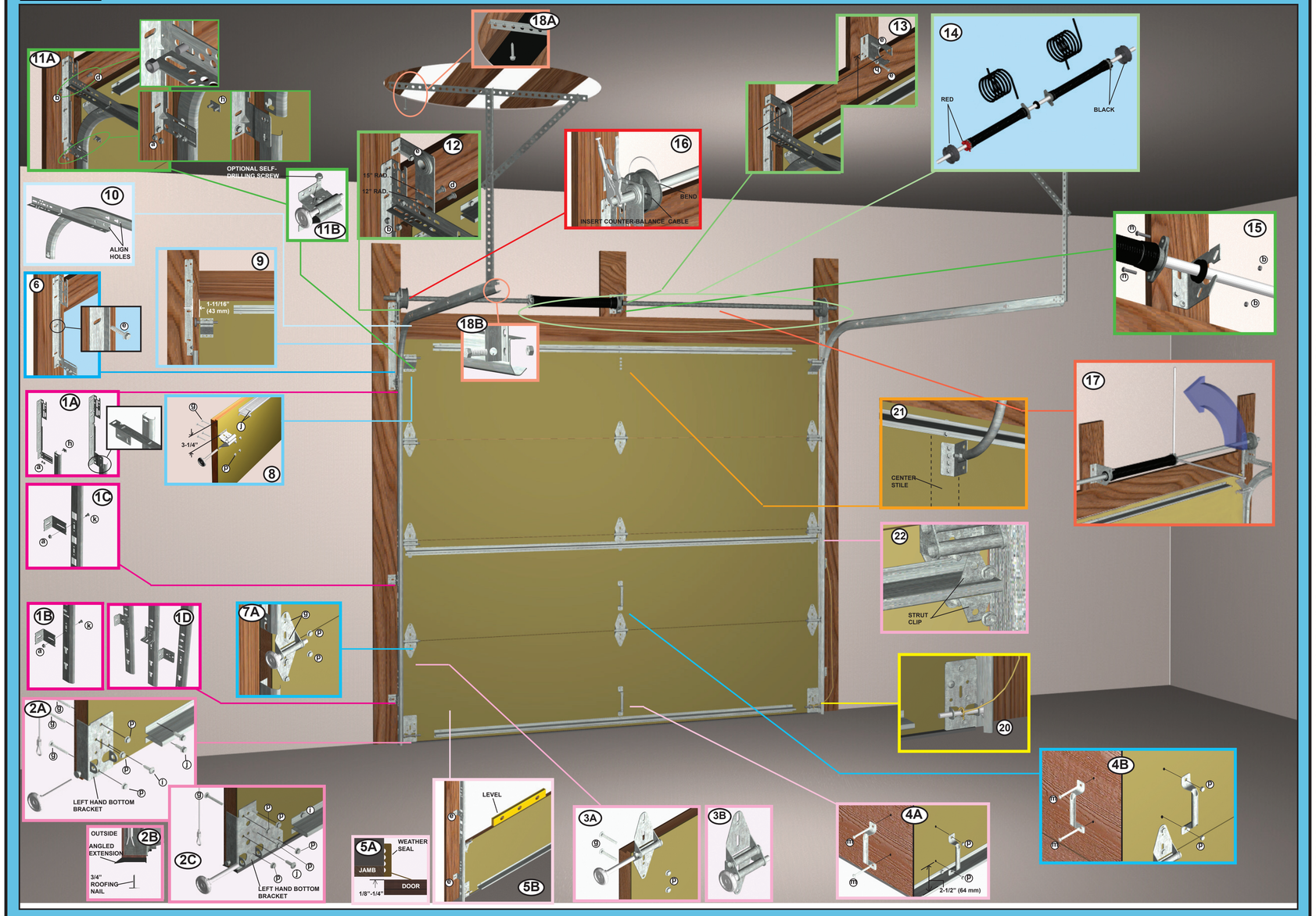
7A

Make sure the top leaves of all hinges on the bottom section are folded down. With assistance lift second section and place rollers over the tops of the vertical tracks. Install by guiding rollers into the vertical track on both sides and gently lowering the section onto the bottom section. Keeping the ends of the sections aligned, install remaining section(s), except top section, in same manner. Fasten all hinges to connect the sections by flipping up the hinge leaf and securing with (2) 1/4-20 x 1-7/8" carriage bolts and nuts.

NOTE: To install lock, see lock instructions included in the lock assembly bag.

WayneWood Doors Models: 40,42,43,45,47

Torsion Spring Installation Instructions Layout



8

Identify the supplied top brackets. Measure down from the top of the section 3-1/4" (83mm) and mark location. Align the top holes on the top bracket with the mark and align the edge of the bracket with the edge of the section. Using the top bracket as a template, drill (4) 9/32" (7mm) holes through the section. Secure the brackets using (4) 1/4-20 x 1-7/8" carriage bolts and hex nuts each. Insert a roller into each top bracket and loosen the bolt in the adjustable slides. Proper adjustment will be required once the track is installed.
Strut Installation (if necessary): Center the short strut onto the top of the top section in between the two top brackets. The strut should be at least 3/4" (19mm) from the top of the section. Secure strut using (2) 1" lag screws on each end and center stile (alligned with hinges) locations.

Place the top section in the door opening. Keeping the ends of the sections aligned, secure it temporarily by driving a nail into the header near the center of the door and bending it over the section. Once section is secure, fold the upper leaves of the hinges from the section below to the top section and secure with (2) 1/4-20 x 1-7/8" carriage bolts and nuts.

9

Position flagangle 1-11/16" (43 mm) from the edge of the door. Tighten the first lag screw then secure the flagangle to the jamb with (2) more 5/16" x 1-5/8" lag screws. Now complete the vertical track installation on both sides by securing the center jamb brackets and tightening other lag screws.
IMPORTANT! Vertical tracks must be secured so that the rollers are touching the deepest part of the curved side of the track.

10

Align the Slidelock™ tabs on the applicable horizontal angle with key slots in the horizontal track. Push the parts together. Using a hammer, tap the horizontal angle towards the curved end of the track until the hole in track and angle are aligned.

NOTE: For large size doors, a full length horizontal angle is already spot welded to the horizontal track.

11A-11B

To install horizontal track, place the curved end over the top roller. Align the bottom of the horizontal track with the top of the vertical track. **Fully adjustable track:** Secure the track to the flagangle with (1) stud plate and nuts.
NOTE: For "bolt on" track, secure the horizontal track to the flagangle with (2) 1/4-20 track bolts and nuts.)
Q.I. Track: Align the key slot in the track with the quick install tabs on the flagangle. Push the curved portion of the horizontal track downward to lock into place.

Level horizontal track and bolt the horizontal angle to the slot in the flagangle using (1) 3/8-16 x 3/4" truss head bolt and nut. Repeat for other side. Remove nail which is temporarily holding the top section.

With tracks installed you can adjust the top brackets. Vertically align the top section with the lower sections. Once aligned, position top roller in adjustable slide against horizontal track, maintain position and tighten nut(s).
Add a 1/4-20 x 11/16" self-drilling screw into the slide to lock the slide in place (see 11B). Repeat for other side.

IMPORTANT! Failure to remove nail before attempting to raise door could cause permanent damage to top section.

⚠WARNING! DO NOT ATTEMPT TO RAISE DOOR AT THIS TIME.

12

End bearing brackets are right and left. Locate the end bearing bracket above the flagangle and secure the bracket to the horizontal angle using (2) 3/8-16 x 3/4" truss head bolts and nuts. Once the bracket is secured to the horizontal angle, secure the top of the bracket to the jamb using (1) 5/16" x 1-5/8" lag screw.

IMPORTANT! End bearing brackets must be attached through the lower slots on 12" radius track and through the upper slots on 15" radius track.

13

Locate the center of the door and mark a vertical pencil line on the spring pad. Then measure the distance from the center of the mounting hole (hole where tube fits into) in the end bearing bracket to the top of the door. Using that same distance, mark a horizontal line on the spring pad, measuring up from the top of the door. Align the center bearing bracket edge along the vertical pencil line on the spring pad as shown. In addition, position the center bearing bracket halfway over the horizontal pencil line. This will level the torsion tube through the end bearing brackets when installed. Attach the center bearing bracket to the spring pad using (2) 5/16" x 1-5/8" lag screws and (1) 5/16" x 2" tamper-resistant lag screw.

IMPORTANT! Use the 5/16" x 1-5/8" tamper-resistant lag screw ONLY if spring pad is mounted over masonry.

IMPORTANT! Tamper-resistant lag screw MUST be attached through the bottom hole of the center bearing bracket.

14

Facing the inside of the door, lay the torsion tube on the floor. Lay the black color coded winding cone with spring and cable drum on the floor at the right end of the tube. Then lay the red color coded winding cone with spring and cable drum on the floor at the left end of the tube.

NOTE: Right and left hand is always determined from inside the building looking out.

NOTE: Some lighter weight doors are provided with only (1) torsion spring. Identify the spring(s) provided as either right hand wound (red winding cone), which goes on the LEFT HAND SIDE or left hand wound (black winding cone), which goes on the RIGHT HAND SIDE.

NOTE: The set screws used on all Torsion Counterbalance cable drums and winding cones are now painted red. DO NOT identify right and left hand side by the set screws.

Slide the nylon center bushing onto the torsion tube followed by the spring(s) and cable drums. The nylon center bushing, spring(s), and cable drums must be positioned as shown in the illustrations. With assistance, pick up the torsion tube assembly and slide one end the of tube through one end bearing bracket. Lay the torsion tube into the center bearing bracket and slide the other end of the tube into the opposite end bearing bracket. Position the torsion tube so that equal amounts of the tube extend from each end bearing bracket.

15

Slide the nylon center bushing into the end of (1) stationary spring cone and align the cone(s) with the holes in the center bearing bracket. Secure the spring(s) to the center bearing bracket with (2) 3/8-16 x 1-1/2" bolts and nuts.

IMPORTANT! Springs under tension can be dangerous. Spring warning tag must be attached to center bearing bracket in obvious sight. If this tag is missing, contact Wayne-Dalton Corp. for free replacements.

Clamp locking pliers onto both vertical tracks just above the third roller. This is to prevent door from raising while winding the spring(s).

⚠WARNING!

FAILURE TO CLAMP TRACK CAN ALLOW DOOR TO RAISE AND CAUSE SEVERE INJURY OR DEATH.

16

Thread the counterbalance cables around the back side of the cable drums and verify that there is no cable obstructions. Before hooking cables into drums, slide the loose cable buttons against the crimped buttons and with a pliers bend a 90 degree angle in the cable as illustrated.

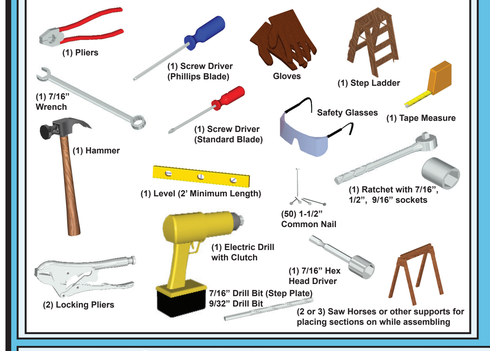
NOTE: Some cable assemblies only have the crimped cable button.

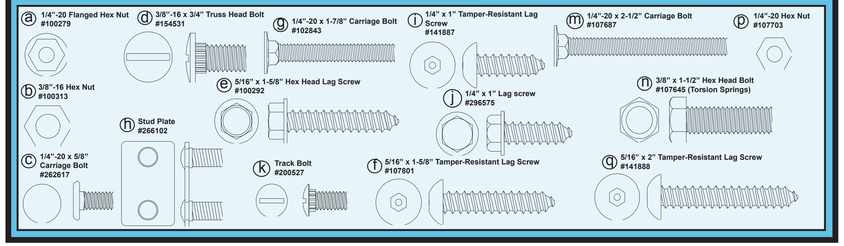
Hook the cables into the drums. Slide the left hand cable drum against the end bearing bracket and tighten the set screws in the drum to 14-15 ft lbs. of torque (Once set screws contact the tube, tighten screws one full turn). Rotate the left hand drum and torsion tube until cable is taut. Attach locking pliers to torsion tube and brace locking pliers against jamb to keep cable taut. Slide the right hand cable drum against the end bearing bracket and rotate drum until cable is taut. Tighten set screws in right hand cable drum.

Clamp locking pliers onto the torsion tube, to keep it from rotating.
CAUTION! Check each cable, making sure both are seated properly on the cable drums and have equal cable tension.

CONTINUE INSTALLATION INSTRUCTIONS ON REVERSE SIDE.

Required Tools


(1) Pliers
(1) Screw Driver (Phillips Blade)
Gloves
(1) Step Ladder
(1) 7/16" Wrench
(1) Screw Driver (Standard Blade)
Safety Glasses
(1) Tape Measure
(1) Hammer
(1) Level (2' Minimum Length)
(1) Ratchet with 7/16", 1/2", 9/16" sockets
(50) 1-1/2" Common Nail
(1) Electric Drill with Clutch
(1) 7/16" Hex Head Driver
(2) Locking Pliers
7/16" Drill Bit (Step Plate)
9/32" Drill Bit
(2 or 3) Saw Horses or other supports for placing sections on while assembling


a 1/4"-20 Flanged Hex Nut #100279
d 3/8"-16 x 3/4" Truss Head Bolt #154531
g 1/4"-20 x 1-7/8" Carriage Bolt #102843
i 1/4" x 1" Tamper-Resistant Lag Screw #141887
m 1/4"-20 x 2-1/2" Carriage Bolt #107687
p 1/4"-20 Hex Nut #107703
b 3/8"-16 Hex Nut #100313
e 5/16" x 1-5/8" Hex Head Lag Screw #100292
j 1/4" x 1" Lag screw #296575
n 3/8" x 1-1/2" Hex Head Bolt #107645 (Torsion Springs)
h Stud Plate #266102
c 1/4"-20 x 5/8" Carriage Bolt #262617
k Track Bolt #200527
f 5/16" x 1-5/8" Tamper-Resistant Lag Screw #107801
q 5/16" x 2" Tamper-Resistant Lag Screw #141888

17

Position a ladder slightly to the side of spring so that the winding cone is easily accessible, yet your body is not in the path of the winding bars. Check the tag(s) attached to the spring(s) for the number of required spring turns.

6'0" Door Height	=	**Approx. 6-3/4 Turns**
6'3" Door Height	=	**Approx. 7 Turns**
6'6" Door Height	=	**Approx. 7-1/4 Turns**
6'9" Door Height	=	**Approx. 7-1/2 Turns**
7'0" Door Height	=	**Approx. 7-3/4 Turns**
7'3" Door Height	=	**Approx. 8 Turns**
7'6" Door Height	=	**Approx. 8-1/4 Turns**
7'9" Door Height	=	**Approx. 8-1/2 Turns**
8'0" Door Height	=	**Approx. 8-3/4 Turns**

⚠WARNING! Prior to winding or making adjustments to the springs, ensure you're winding in the proper direction as stated in the Installation Instructions. Otherwise, the spring fittings may release from spring if not wound in the proper direction and could result in severe or fatal injury.

Inserting winding bars into holes of winding cone, one after the other, rotate winding cone upward toward ceiling 1/4 turn at a time until correct number of turns for your door height is achieved. As the last 1/4 turn is achieved, securely hold winding bar while tightening both set screws in winding cone to 14-15 ft-lbs of torque (Once set screws contact the tube, tighten screws one full turn). Carefully remove winding bar from winding cone. If required, repeat for other side.

While holding the door down to prevent it from rising unexpectedly, in the event the spring(s) were overwound. Carefully remove the locking pliers from the vertical tracks and torsion tube. Raise the door until the top section and half of the next section are in a horizontal position. Do not raise door any further since rear of horizontal track is not yet supported.

⚠WARNING!

RAISING DOOR FURTHER CAN RESULT IN DOOR FALLING AND CAUSE SEVERE INJURY OR DEATH.

Now clamp a pair of locking pliers to the vertical tracks just above the second roller on one side, and just below the second roller on the other side. This will prevent the door from raising or lowering while installing the rear support.

18A-18B

Using perforated angle, fabricate rear support for horizontal tracks as shown.

IMPORTANT! Using 5/16" x 2" lag screws, make sure that support is fastened into ceiling joist, or adequate framing members to hold the weight of the door. Keeping the horizontal track parallel to the edge of the door sections, raise the horizontal track to a level position and bolt it to the rear support structure using (1) 5/16" hex bolt and nut on each side. Track must be secured and braced to prevent movement. The bolt should extend into the track to act as a roller stop. Repeat for other side. Remove locking pliers and close door.

⚠WARNING! KEEP HORIZONTAL TRACK PARALLEL AND WITHIN 3/4" OF DOOR EDGE, OTHERWISE DOOR COULD FALL FROM TRACKS, RESULTING IN SERIOUS INJURY OR DEATH.

19 (Not illustrated)

Permanently attach the vinyl weather stripping (or wood door stops) to both door jambs and the header. Now lift the door and check it's balance. Unwind spring(s) if door lifts by itself or if it is hard to pull down. Wind spring(s) if door is difficult to lift or too easy to pull down.

⚠WARNING! Prior to winding or making adjustments to the springs, ensure you're winding in the proper direction as stated in the Installation Instructions. Otherwise, the spring fittings may release from spring if not wound in the proper direction and could result in severe or fatal injury.

To adjust spring tension, fully close door. Apply locking pliers to track above third roller. Insert a winding bar into the winding cone. Push upward on the winding bar while carefully loosening the set screws in the winding cone. BE PREPARED TO SUPPORT THE FULL FORCE OF THE TORSION SPRING ONCE THE SET SCREWS ARE LOOSE.

NOTE: On doors utilizing one spring, it will be necessary to clamp the torsion tube with locking pliers to keep counterbalance cables on cable drums BEFORE loosening set screws.

Carefully adjust spring tension 1/4 turn. Retighten both set screws in the winding cone and if required, repeat for the other side. Recheck door balance DO NOT ADJUST MORE THAN 1/2 TURN FROM THE RECOMMENDED NUMBER OF TURNS. If door still does not balance correctly, contact a qualified door agency.

If the door still does not operate easily, lower the door into the closed position, UNWIND THE SPRING(S) FULLY (Reference the insert sheet "Removing the Old Door/Preparing the Opening" section on Torsion Spring Removal), and recheck the following the items:

1.) Check the door for level.
2.) Check the torsion tube for level.
3.) Check the track spacing.
4.) Check the counterbalance cables for equal tension.
5.) Check the track for potential obstruction of the rollers.
6.) Clamp locking pliers onto track and rewind spring(s).

IMPORTANT! If door still does not operate properly, then contact a qualified door agency.

20

Twist the No. 6 screw eye into the wood jamb approximately 48" to 50" (1220 to 1270 mm) from the floor. Tie the pull rope to the screw eye and to the bottom bracket as shown.

⚠WARNING! DO NOT INSTALL PULL ROPES ON DOORS WITH ELECTRIC OPERATORS. CHILDREN MAY BECOME ENTANGLED IN THE ROPE CAUSING INJURY OR DEATH.

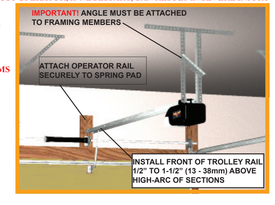
21

TYPICAL OPERATOR INSTALLATION

If you are installing an electric operator on your door, the following information is provided to ensure proper function of your door/operator installation. See fig. 21 (on reverse side) for a typical operator arm installation.

1. Follow the installation instructions supplied with your operator.
2. Reinforce top section per manufacturer's recommendation prior to attaching operator.
3. Install trolley rail 1/2" to 1-1/2" (13 - 38 mm) above high arc of top section of the door.
4. Mount operator to ceiling so that 1" to 1-1/2" (25 - 38 mm) clearance is maintained between trolley rail and top section when door is fully open (trolley rail will slope down towards rear).
5. The operator bracket must be mounted to the operator stile on the top section so it bridges the transition point in section thickness.
6. Attach operator rail to spring pad (vertical wood support above center of header).
7. Attach operator to ceiling using perforated angle.
8. **IMPORTANT!** Angle(s) must be attached to framing memeber(s).

⚠WARNING! OPERATOR MUST BE TESTED AT TIME OF INSTALLATION AND MONTHLY THEREAFTER TO ENSURE THAT DOOR REVERSES ON CONTACT WITH 2 X 4 BOARD LAID FLAT UNDER THE DOOR. FAILURE TO ADJUST OPERATOR, IF NECESSARY, CAN RESULT IN SEVERE INJURY OR DEATH. IF YOUR OPERATOR IS EQUIPPED WITH PHOTOELECTRIC SYSTEM, THEN THIS MUST BE TESTED AT THE SAME TIME TO ENSURE THAT DOOR DOES NOT CLOSE AND A CLOSING DOOR OPENS IF SYSTEMS IS OBSTRUCTED. FAILURE TO MAKE ADJUSTMENTS, IF NECESSARY, CAN RESULT IN SEVERE INJURY OR DEATH.


IMPORTANT! ANGLE MUST BE ATTACHED TO FRAMING MEMBERS
ATTACH OPERATOR RAIL SECURELY TO SPRING PAD
INSTALL FRONT OF TROLLEY RAIL 1/2" TO 1-1/2" (13 - 38mm) ABOVE HIGH-ARC OF SECTIONS

Wayne Dalton

Wayne-Dalton Corp.
P.O. Box 67
Mt. Hope, Ohio 44660

IMPORTANT SAFETY NOTICES

Read these instructions carefully before attempting installation. If in question about any of the procedures, do not perform the work. Instead, have a qualified door agency do the installation or repairs.

1. Wear protective gloves during installation to avoid possible cuts from sharp metal edges.

2. It is always recommended to wear eye protection when using tools, otherwise serious eye injury could result.

3. Avoid installing your new door on windy days. Door could fall during the installation and cause damage and personal injury.

4. If the door is to be electrically operated at any time, all pull ropes **MUST** be removed to prevent injury or death to children who may become entangled in the rope. The locking mechanism **MUST** also be disengaged.

5. Operate door **ONLY** when properly adjusted and free of obstructions.

6. Should the door become hard to operate or completely inoperative, a qualified door agency should correct the problem to prevent damage to the door or serious personal injury.

7. **DO NOT PERMIT** children to play with the garage door or the electrical controls. Fatal injury could result, should the child become entrapped between the door and the floor.

8. To prevent serious injury or death, avoid standing in the open doorway or walking through the doorway while the door is moving.

9. Door is constantly under **EXTREME SPRING TENSION**. To prevent possible serious injury or death, adjustments, repairs, removal or installation, **ESPECIALLY of SPRING ASSEMBLIES, CABLES or BOTTOM CORNER BRACKETS**, should be performed **ONLY** by qualified door service people.

10. If your existing garage door opener does not have a reversing mechanism, you should consider purchasing one that has up to date safety features. These features can prevent opener related property damage or personal injury.

11. Check all bolted connections monthly during the lifetime of the door to prevent damage or personal injury caused by loose connections.

12. Definition of key words used in this manual:

⚠WARNING! -- Indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death.

IMPORTANT! -- Required step for safe and proper door operation.

NOTE: -- Information assuring proper installation of the door.

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Strutting Schedule: Doors 8 ft. high and below

Product	Door Width 8'-0" to 12'-2"	Door Width 12'-3" to 16'-0"	Door Width 16'-1" to 18'-0"
Model 40,42,43,45,47	**(3) 2" U-Bars	**(3) 2" U-Bars	**(3) 3" U-Bars

** (2) SHORT U-BARS AND THE REST LONG U-BARS WITH HOLES

Strutting Schedule: Doors greater than 8 ft. high

Product	Door Width 8'-0" to 10'-2"	Door Width 10'-3" to 16'-0"	Door Width 16'-1" to 18'-0"
Model 40,42,43,45,47	** (1) 2" U-Bar per section	** (1) 2" U-Bar per section	** (1) 3" U-Bar per section

** (2) SHORT U-BARS AND THE REST LONG U-BARS WITH HOLES

Maintenance and Painting Instructions for All Wood Doors

These instructions apply to all Wood Doors produced and sold by Wayne-Dalton Corp. The interior and exterior surfaces, as well as all edges must be properly primed, painted and maintained if satisfactory performance is to be achieved.

The purpose for painting is to both protect and beautify the substrates. These requirements for finishing are intended to achieve both functions for reasonable service life of wood doors.

Wood doors must be completely finished (3 top coats) prior to installation, to ensure that the interior and exterior surfaces, as well as all edges of the doors are properly protected against moisture or other contaminants. Wood doors, in a non-finished condition, must not be transported or stored where the wood surfaces can be exposed to moisture or other contaminants. IMPROPER STORAGE, TRANSPORTATION OR DELAY IN FINISHING, THAT EXPOSE WOOD DOOR SURFACES TO MOISTURE OR OTHER CONTAMINANTS, WILL RESULT IN THE WARRANTY BEING VOIDED.

Surface Preparation

All surfaces must be clean, free of dust and dirt and any other contamination. Any scarring or stains that occur during transportation, handling and storage must be re-sanded to the original condition.

Painted Finishes

When painting a door, the finish coat base must be the same as the primer coat base. A latex based finish paint is recommended for use over a latex based primer, and an oil based finish paint is recommended for use over an oil based primer. Prime the interior and exterior surfaces, as well as all edges, using paint approved for use on the specific species of wood substrate being finished. (Note: Some species of wood, such as cedar, require special primers and finishes to prevent tannin stains from appearing. Consult with your paint supplier.) If the door is factory primed by Wayne-Dalton Corp., the priming step is not required, unless touch-up is needed due to surface preparation and re-sanding. (Note: Wayne-Dalton Corp. uses a latex primer, so latex finish paint is required.) Finish paint the interior and exterior surfaces, as well as all edges with at least 2 coats of finish paint over the primer. Follow paint manufacture's label directions completely for all coatings.

Clear or Stained Finishes

If staining, apply an exterior grade stain, approved for use on each species of wood substrate being finished, to the interior and exterior surfaces, as well as all edges, following stain manufacturer's label directions. The stain selected must be compatible with the urethane finish that will be used to finish the door. After proper drying time for the stain (or if stain in not being applied), apply 1 coat of urethane finish to the interior and exterior surfaces, as well as all edges. After recommended drying time of 1st coating, sand with a fine grit (320) sandpaper. Clean all surfaces of sanding dust and apply a 2nd coat of the urethane coating to the interior and exterior surfaces, as well as all edges,. After 2nd coat is dry, sand with a fine grit (320) sandpaper again. Clean all surfaces of sanding dust and apply a final 3rd coat. Three urethane finish coats are required for proper finish. Follow the finish manufacturer's label directions completely for each coating applied. (NOTE: Do not stain MDO plywood, apply paint only. Only a urethane finish is an approved top coat for stained or natural doors. Other types of top coat finishes, including deck sealers, are not acceptable and if used, will void the warranty.

Maintenance and Refinishing

Yearly inspection of all the surfaces of the garage door(s) will reveal the extent of weathering and the need for refinishing. When the finish becomes eroded or thin, clean and prime the areas of deterioration. Follow up with a complete refinishing of the door(s), according to the above directions, as well as the manufacturer's label directions. Protecting the door(s) from prolonged exposure to moisture and sunlight is vital in extending the service life of your garage door(s).

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Wayne Dalton

Residential Wood Panel
LIMITED WARRANTY

Subject to the terms and conditions contained in this Limited Warranty, Wayne-Dalton Corp. ("Manufacturer") warrants the sections of the door, against defects in material and workmanship, for a period of **ONE (1) YEAR** from the time of delivery provided:

(i) The interior and exterior surfaces, as well as all edges of the wood door(s) are properly finished according to the Manufactures Maintenance and Painting Instructions and finish manufacturer's instructions. All surfaces of the wood door(s) must be completely finished (3 total coats, including primer coat) prior to installation, to ensure that the interior and exterior surfaces, as well as all edges of the doors are properly protected against moisture or other contaminants. Wood doors, in a non-finished condition, must be transported and stored so the wood surfaces are NOT exposed to moisture or other contaminants. If the door(s) is not finished within **TEN (10) DAYS** of delivery, this warranty shall only extend to defects in workmanship and materials that appear within **ONE (1) MONTH**. IMPROPER TRANSPORTATION, STORAGE OR DELAYS IN FINISHING, THAT ALLOWS EXPOSURE OF THE WOOD DOOR SURFACES TO MOISTURE OR OTHER CONTAMINANTS WILL RESULT IN THE WARRANTY BEING VOIDED.

The Manufacturer warrants the garage door hardware, tracks and springs of the above-described door, for a period of **ONE (1) YEAR** from the date of installation, against defects in material and workmanship, subject to all the terms and conditions below.

The Manufacturer will not be responsible for grain and color variations of natural wood. These natural variations in grain and color are not product defects, and therefore will not be considered under this Limited Warranty.

The Manufacturer uses high quality material for framework, door skins, overlays, and panel materials. Exposure of wood to the environment may cause bowing, checking and/or cracking of a door section regardless of efficiency of painting. This is not considered a defect; it is an uncontrollable characteristic of natural wood. The dealer and the end user have the responsibility to select the type of material and/ or door which will offer the best results and longevity for the climate and/or environmental condition in which they will use the product.

This Limited Warranty is extended only to the person who purchased the product and continues to own the premises (and/or where the door is installed) as his/her primary residence ("Buyer"). This Limited Warranty does not apply to residences other than primary, or to commercial or industrial installations, or to installations on rental property (even when used by a tenant as a residence). This Limited Warranty is not transferable to any other person (even when the premises is sold), nor does it extend benefits to any other person. As a result this Limited Warranty does NOT apply to any person who purchases the product from someone other than an authorized Wayne-Dalton dealer or distributor.

The Manufacturer will not be responsible for any damage attributable to improper storage, improper installation, or any alteration of the door or its components, abuse, damage from corrosive fumes or substances, salt spray or saltwater air, fire, Acts of God, failure to properly maintain the door, or attempt to use the door, its components or related products for other than its intended purpose and its customary usage. This Limited Warranty does not cover ordinary wear. This Limited Warranty will be voided if any holes are drilled into the door, other than those specified by the Manufacturer.

THIS LIMITED WARRANTY COVERS A CONSUMER PRODUCT AS DEFINED BY THE MAGNUSON-MOSS ACT. NO WARRANTIES, EXPRESS OR IMPLIED (INCLUDING BUT NOT LIMITED TO THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) WILL EXTEND BEYOND THE TIME PERIOD SET FORTH IN **UNDERSCORED BOLD FACE TYPE** IN THIS LIMITED WARRANTY, ABOVE.

- Some States do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Any claim under this Limited Warranty must be made in writing, within the applicable warranty period, to the dealer from which the product was purchased. Unless the dealer is no longer in business, a written claim to the Manufacturer will be the same as if no claim had been made at all.

At the Manufacturer's option, pursuant to the dealer having notified the Manufacturer of a warranty claim, a service representative may inspect the product on site. Buyer may be required to return the product to the Manufacturer at Buyer's expense. Buyer agrees to cooperate with any representative of the Manufacturer and to give such representative full access to the product with the claimed defect and full access to the location of its installation.

If the Manufacturer determines that the claim is valid under the terms of this Limited Warranty, the Manufacturer will cause the defective product to be repaired or replaced. The decision about the manner in which the defect will be remedied will be at the discretion of the Manufacturer, subject to applicable law. THE REMEDY WILL COVER ONLY MATERIAL. THIS LIMITED WARRANTY DOES NOT COVER OTHER CHARGES, SUCH AS FIELD SERVICE LABOR FOR REMOVAL, INSTALLATION, PAINTING, SHIPPING, ETC.

Any repairs or replacements arranged by Manufacturer will be covered by (and subject to) the terms, conditions, limitations and exceptions of this Limited Warranty; provided, however, that the limitation date for the repaired or replaced product will be deemed to be the date the original product was installed, and this Limited Warranty will expire at the same time as if there had been no defect. If a claim under this Limited Warranty is resolved in a manner other than described in the immediately preceding paragraph, then neither this Limited Warranty nor any other warranty from the Manufacturer will cover the repaired or replaced portion of the product.

THE REMEDIES FOR THE BUYER DESCRIBED IN THIS LIMITED WARRANTY ARE EXCLUSIVE and take the place of any other remedy. The liability of the Manufacturer, whether in contract or tort, under warranty, product liability, or otherwise, will not go beyond the Manufacturer's obligation to repair or replace, at its option, as described above. THE MANUFACTURER WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, including (but not limited to) damage or loss of other property or equipment, personal injury, loss of profits or revenues, business or service interruptions, cost of capital , cost of purchase or replacement of other goods, or claims of third parties for any of the foregoing.

- Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

No employee, distributor, dealer, representative, or other person has the authority to modify any term or condition contained in this Limited Warranty or to grant any other warranty on behalf of or binding on the Manufacturer, and anyone's attempt to do so will be null and void.

Buyer should be prepared to verify the date of installation to the satisfaction of the Manufacturer.

The rights and obligations of the Manufacturer and Buyer under this Limited Warranty will be governed by the laws of the State of Ohio, USA, to the extent permitted by law.

- This Limited Warranty gives you specific legal rights and you may also have other rights, which may vary from State to State.

****NOTE:** Variations in color or graining of natural wood is not considered a product defect, and therefore not covered under the limited warranty.
******Grain and color variations are inherent to natural wood. These natural variations in grain and color are not product defects and therefore will not be considered under Wayne-Dalton Corp.'s limited warranty.

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Wayne Dalton

WayneWood - Torsion Spring Models: 40,42,43,45,47 Installation Instructions and Owners Manual

www.wayne-dalton.com

Parts List

(A1)	TOP BRACKET (BASE)	# 270343
(A2)	TOP BRACKET (SLIDE)	# 270344
(B1)	BOTTOM BRACKET (RIGHT)	# 295763
(B2)	BOTTOM BRACKET (LEFT)	# 295762
(C)	ROLLER	# 100269
(D)	VERTICAL TRACK	1 PAIR
(E1)	QUB - 6 JAMB BRACKET	# 297925
(E2)	QUB - 7 JAMB BRACKET	# 297926
(E3)	QUB - 8 JAMB BRACKET	# 297927
(F1)	ST-0 JAMB BRACKET (SHORT)	# 297866
(F2)	ST-1 JAMB BRACKET (LONG)	# 270345
(G)	HORIZONTAL TRACK	1 PAIR
(H1)	R 12" QU. FLAGANGLE (LEFT, 18-1/2")	# 282532
(H2)	R 12" QU. FLAGANGLE (RIGHT, 18-1/2")	# 282533
(J1)	R 12" UNIV. FLAGANGLE (LEFT, 18-1/8")	# 282506
(J2)	R 12" UNIV. FLAGANGLE (RIGHT, 18-1/8") # 283207	# 282514
(K1)	R 15" UNIV. FLAGANGLE (LEFT, 18-7/16")	# 282516
(K2)	R 15" UNIV. FLAGANGLE (RIGHT, 18-7/16")	# 282515
(L1)	32-3/32" HORZ. ANGLE	# 283237
(L2)	88-5/8" GI HORIZ. ANGLE (RIGHT)	# 282541
(L3)	88-5/8" GI HORIZ. ANGLE (LEFT)	# 282540
(M1)	CABLE DRUM (RIGHT)	# 284653
(M2)	CABLE DRUM (LEFT)	# 284654
(N)	TORSION TUBE	AS REQUIRED
(O)	COUNTERBALANCE CABLES	1 PAIR
(P1)	END BEARING BRACKET (RH)	# 270415
(P2)	END BEARING BRACKET (LH)	# 270416
(Q)	CENTER BEARING BRACKET	# 100256
(R)	NYLON CENTER BUSHING	# 100256
(S)	TORSION SPRING(S)	AS REQUIRED
(T)	STUBTS	AS REQUIRED
(U)	REAR SUPPORT	SOLD SEPARATE-
(V)	# 8 SCREW EYE	# 100342
(W)	60" PULL ROPE	# 274884

NOTE: Depending on the door model, some parts listed will not be supplied if not necessary

PART NO. 307327 REV1 08/03/2009

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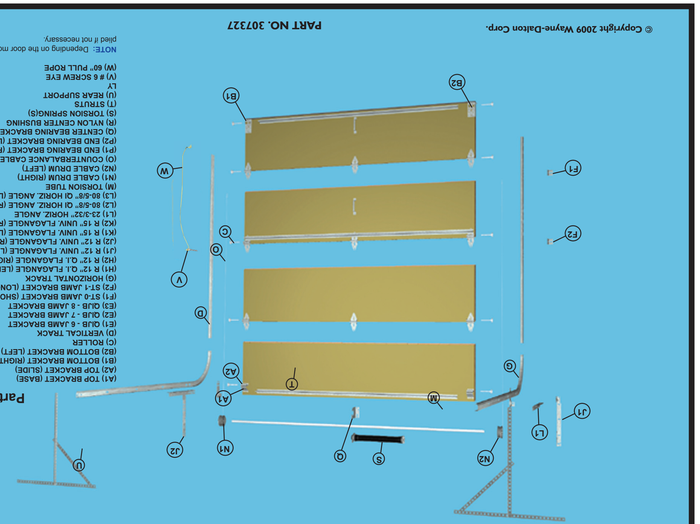
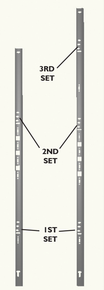


Quick Install Jamb Bracket Schedule

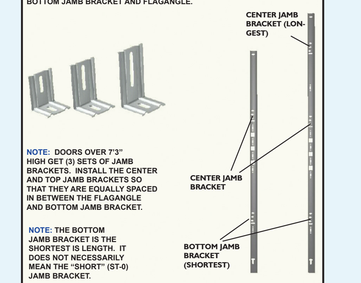
Door Height	1st Set	2nd Set	3rd Set
6'-6"	QUB-7 TOP	QUB-8 MID	N/A
7'-0"	QUB-7 TOP	QUB-8 MID	N/A
7'-6"	QUB-6 TOP	QUB-7 BOT	QUB-8 BOT
8'-0"	QUB-6 TOP	QUB-7 BOT	QUB-8 BOT



NOTE: Jamb brackets are stamped for identification.

Fully Adjustable Track Jamb Bracket Schedule

INSTALL THE SHORTEST JAMB BRACKET ON THE BOTTOM HOLE/SLOT PATTERN. THE CENTER JAMB BRACKET(S) IS/ARE CENTERED BETWEEN THE BOTTOM JAMB BRACKET AND FLAGANGLE.



NOTE: DOORS OVER 7'3" HIGH GET (3) SETS OF JAMB BRACKETS. INSTALL THE CENTER AND TOP JAMB BRACKETS SO THAT THEY ARE EQUALLY SPACED IN BETWEEN THE FLAGANGLE AND BOTTOM JAMB BRACKET.

NOTE: THE BOTTOM JAMB BRACKET IS THE SHORTEST IS LENGTH. IT DOES NOT NECESSARILY MEAN THE "SHORT" (ST-0) JAMB BRACKET.

NOTE: Jamb brackets are stamped for identification.